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| Sheet   | 1 | of | 13 | Application Number              | 10/661,088             |
|   |   |    |    | Filing Date                     | 09/12/2003             |
|   |   |    |    | First Named Inventor            | Andrew Vaillant et al. |
|   |   |    |    | Group Art Unit                  | 1614                   |
|   |   |    |    | Examiner Name                   |                        |
|   |   |    |    | Attorney Docket Number          | 029849-0206            |

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

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|--------------------|-----------------------|--|----------------|
|                    | A2<br>/Bo Peng        | AGRAWAL and KANDIMALLA, "Antisense and/or Immunostimulatory Oligonucleotide Therapeutics," <i>Current Cancer Drug Targets</i> 1:197-209 (2001)   |                |
|                    | A3<br>/Bo Peng        | ALLEN and CHONN, "Large Unilamellar Liposomes with Low Uptake into the Reticuloendothelial System," <i>FEBS Letters</i> 223(1):42-46 (1987)  |                |
|                    | A4<br>/Bo Peng        | ARCHAMBAULT, <i>et al.</i> , "Phosphorothioate oligonucleotides inhibit the replication of lentiviruses and type D retroviruses, but not that of type C retroviruses," <i>Arch Virol</i> 139:97-109 (1994)   |                |

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| Examiner<br>Signature | /Bo Peng/ | Date<br>Considered | 04/28/2006 |
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| B P                             | A5                    | BERKOW, et al., "Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)," <i>The Merck Manual of Diagnosis and Therapy</i> , 15 <sup>th</sup> ed., 2499-2506 and 46-49 (1987)  |  |  |  |                |
|                                 | A6                    | BLUME and CEVC, "Liposomes for the sustained drug release in vivo," <i>Biochimica et Biophysica Acta</i> 1029:91-97 (1990)  |  |  |  |                |
|                                 | A7                    | BRUNTON, "Section VI Drugs Affecting Gastrointestinal Function," <i>The Pharmacological Basis of Therapeutics</i> 9(38):934-935 (1996)  |  |  |  |                |
|                                 | A8                    | BUUR, et al., "Penetration of 5-Fluorouracil and Prodrugs Across the Intestine of the Albino Rabbit: Evidence for Shift in Absorption Site from the Upper to the Lower Region of the Gastrointestinal Tract by Prodrugs," <i>Journ. of Controlled Release</i> 14:43-51 (1990) |  |  |  |                |
|                                 | A9                    | CAMPBELL and REIN, "In Vitro Assembly Properties of Human Immunodeficiency Virus Type 1 Gag Protein Lacking the p6 Domain," <i>Journ. of Virol.</i> 73:2270-2279 (1999)   |  |  |  |                |
|                                 | A10                   | CEVC, et al., "Ultraflexible vesicles, Transfersomes, have an extremely low pore penetration resistance and transport therapeutic amounts of insulin across the intact mammalian skin," <i>Biochimica et Biophysica Acta</i> 1368:201-215 (1998)                              |  |  |  |                |
|                                 | A11                   | CHENG, et al., "Interactions Between Single-Stranded DNA Binding Protein and Oligonucleotide Analogs with Different Backbone Chemistries," <i>Journ. Mol. Recognition</i> 10:101-107 (1997)   |  |  |  |                |
|                                 | A12                   | CONSTANTINIDES, et al., "Formulation and Intestinal Absorption Enhancement Evaluation of Water-in-Oil Microemulsions Incorporating Medium-Chain Glycerides," <i>Pharmaceutical Res.</i> 11:1385-1390 (1994)   |  |  |  |                |
|                                 | A13                   | CROOKE, et al., "Pharmacokinetic Properties of Several Novel Oligonucleotide Analogs in mice," <i>Journ. Pharm. and Experim. Therap.</i> 277(2):923-937 (1996)  |  |  |  |                |
| ▼                               | A14                   | CROOKE, S., "Progress in Antisense Technology: The End of the Beginning," <i>Meth. in Enzym.</i> 313:3-45 (1999)  |  |  |  |                |

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| BP                              | A15                   | Du PLESSIS, et al., "Topical Delivery of Liposomally Encapsulated Gamma-Interferon," <i>Antivir. Res.</i> 18:259-265 (1992)  |  | T <sup>6</sup> |
|                                 | A16                   | EL-HARIRI, et al., "The Mitigating Effects of Phosphatidylcholines on Bile Salt- and Lysophosphatidylcholine-induced Membrane Damage," <i>J. Pharm. Pharmacol.</i> 44:651-654 (1992)   |  |                |
|                                 | A17                   | ENGLISCH and GAUSS, "Chemically Modified Oligonucleotides as Probes and Inhibitors," <i>Angewandte Chemie</i> 30(6):613-722 (1991)   |  |                |
|                                 | A18                   | FENG, et al., "Reversible Binding of Recombinant Human Immunodeficiency Virus Type 1 Gag Protein to Nucleic Acids in Virus-Like Particle Assembly In Vitro," <i>Journ. of Virol.</i> 76(22):11757-11762 (2002)   |  |                |
|                                 | A19                   | FENNEWALD, et al., "Inhibition of herpes simplex virus in culture by oligonucleotides composed entirely of deoxyguanosine and thymidine," <i>Antiviral Res.</i> 26:37-54 (1995)  |  |                |
|                                 | A20                   | GABIZON, et al., "Liposome formulations with prolonged circulation time in blood and enhanced uptake by tumors," <i>Proc. Natl. Acad. Sci. USA</i> 85:6949-6953 (1988)   |  |                |
|                                 | A21                   | GOA, et al., "Effect of Phosphorothioate Homo-oligodeoxynucleotides on Herpes Simplex Virus Type 2-induced DNA Polymerase," <i>Journ. of Biol. Chem.</i> 264(19):11521-11526 (1989)  |  |                |
| ↓                               | A22                   | GAO, et al., "Inhibition of Herpes Simplex Virus Type 2 Growth by Phosphorothioate Oligodeoxynucleotides," <i>Antimicrobial Agents and Chemotherapy</i> 34(5):808-812 (1990)   |  |                |

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|                                 | A23                   | HIGUCHI, et al., "Particle Phenomena and Course Dispersions," <i>Remington's Pharmaceutical Sciences</i> 21:301-329 (1985)   |  | T <sup>6</sup> |
|                                 | A24                   | HO, et al., "Preparation of Microemulsions Using Polyglycerol Fatty Acid Esters as Surfactant for the Delivery of Protein Drugs," <i>Journ. of Pharm. Sci.</i> 85:138-143 (1996)   |  |                |
|                                 | A25                   | HU, et al., "Topical delivery of cyclosporine A from non-ionic liposomal systems: an <i>in vivo/in vitro</i> correlation study using hairless mouse skin," <i>S.T.P. Pharma Sciences</i> 4(6):466-469 (1994)   |  |                |
|                                 | A26                   | ILLUM and DAVIS, "The organ uptake of intravenously administered colloidal particles can be altered using a non-ionic surfactant (Poloxamer 338)," <i>FEBS</i> 1212 167:79-82 (1984)   |  |                |
|                                 | A27                   | INAGAWA, et al., "Inhibition of human immunodeficiency virus type 1 replication by P-stereodefined oligo (nucleoside phosphorothioate)s in a long-term infection model," <i>FEBS Lett.</i> 528:48-52 (2002)  |  |                |
|                                 | A28                   | JAIRATH, et al., "Inhibition of respiratory syncytial virus replication by antisense oligodeoxyribonucleotides," <i>Antiviral Res.</i> 33:201-213 (1997)   |  |                |
|                                 | A29                   | JARRETT, H., "Affinity chromatography with nucleic acid polymers," <i>J. Chromatography</i> 618:315-339 (1993)   |  |                |
| ↓                               | A30                   | KABANOV, et al., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells," <i>FEBS Lett.</i> 259:327-330 (1990) |  |                |

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| BP                                     | A31                   | KANDIMALLA, et al., "Effects of Phosphorothioate Oligodeoxyribonucleotide and Oligoribonucleotides on Human Complement and Coagulation," <i>Bioorg. &amp; Med. Chem. Lett.</i> 8:2103-2108 (1998)  |  | T <sup>6</sup> |
|  | A32                   | KEAN, et al., "Inhibition of Herpes Simplex Virus Replication by Antisense Oligo-2'-O-methylribonucleoside Methylphosphonates," <i>Biochemistry</i> 34:14617-14620 (1995)  |  |                |
|  | A33                   | KLIBANOV, et al., "Amphipathic polyethyleneglycols effectively prolong the circulation time of liposomes," <i>FEBS Lett.</i> 268:235-237 (1990)  |  |                |
|  | A34                   | KLIMUK, et al., "Enhanced Anti-Inflammatory Activity of a Liposomal Intercellular Adhesion Molecule-1 Antisense Oligodeoxynucleotide in an Acute Model of Contact Hypersensitivity," <i>Journ. of Pharm. &amp; Exper. Ther.</i> 292:480-488 (2000)             |  |                |
|  | A35                   | KOOL, E., "Replacing the Nucleobases in DNA with Designer Molecules," <i>Acc. Chem. Res.</i> 35:936-943 (2002)   |  |                |
|  | A36                   | LAVIGNE et al., "Is antisense an appropriate nomenclature od design for oligodeoxynucleotides aimed at the inhibition of HIV-1 replication?" <i>AAPS PharmSci</i> , 4:1-11, 2002   |  |                |
|  | A37                   | LEBEDEVA and STEIN, "Antisense Oligonucleotides: Promise and Reality," <i>Annu. Rev. Pharmacol. Toxicol.</i> 41:403-419 (2001)   |  |                |
| ↓                                      | A38                   | LEE, et al., "Mucosal Penetration Enhancers For Facilitation of Peptide and Protein Drug Absorption," <i>Crit. Rev. in Ther. Drug Carrier Syst.</i> 8(2):91-192 (1991)   |  |                |

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| BP                              | A39                   | LERNER, et al., "A Six-Month Trial of Valacyclovir in the Epstein-Barr Virus Subset of Chronic Fatigue Syndrome: Improvement in Left Ventricular Function," <i>Drugs of Today</i> 38(8): 549-561 (2002)  |  |  | T <sup>6</sup> |
| BP                              | A40                   | LETSINGER, et al., "Cholesteryl-conjugated oligonucleotides: Synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture," <i>Proc. Natl. Acad. Sci. USA</i> 86:6553-6556 (1989)                          |  |  |                |
| BP                              | A41                   | MANOHARAN, et al., "Chemical Modifications to Improve Uptake and Bioavailability of Antisense Oligonucleotides," <i>Ann. N.Y. Acad. Sci.</i> 660:306-309 (1992)  |  |  |                |
| BP                              | A42                   | MANOHARAN, et al., "Introduction of a Lipophilic Thioether Tether in the Minor Groove of Nucleic Acids for Antisense Applications," <i>Bioorg. &amp; Med. Chem. Letters</i> 3:2765-2770 (1993)   |  |  |                |
| BP                              | A43                   | MANOHARAN, et al., "Cholic Acid-Oligonucleotide Conjugates for Antisense Applications," <i>Bioorg. &amp; Med. Chem. Lett.</i> 4:1053-1060 (1994)   |  |  |                |
| BP                              | A44                   | MANOHARAN, et al., "Oligonucleotide Conjugates: Alteration of the Pharmacokinetic Properties of Antisense Agents," <i>Nucleosides &amp; Nucleotides</i> 14(3-5):969-973 (1995)   |  |  |                |
| BP                              | A45                   | MANOHARAN, et al., "Lipidic Nucleic Acids," <i>Tetrahedron Lett.</i> 36:3651-3654 (1995)   |  |  |                |
| BP                              | A46                   | MARHSALL, et al., "Inhibition of human immunodeficiency virus activity by phosphorodithioate oligodeoxycytidine," <i>Proc. Natl. Acad. Sci. USA</i> 89:6265-6269 (1992)  |  |  |                |

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|  |   |    |    | Examiner Name            |                        |
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| Sheet  | 7 | of | 13 |                          |                        |

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| BP                              | A47                   | MARSHALL and CARUTHERS, "Phosphorodithioate DNA as a Potential Therapeutic Drug," <i>Science</i> 259:1564-1570 (1993)  |  | T <sup>6</sup> |
|                                 | A48                   | MATSUKURA et al., "Antisense phosphorothioates as antivirals against human immunodeficiency virus (HIV) and hepatitis B virus (HBV)." <i>Toxicology Letters</i> , 82/83: 435-538, 1995.  |  |                |
|                                 | A49                   | MATSUKURA, et al., "Phosphorothioate Analogs of Oligodeoxynucleotides: Inhibitors of Replication and Cytopathic Effects of Human Immunodeficiency Virus," <i>Proc. Natl. Acad. of Sciences of USA</i> 84:7706-7710 (1987)                                      |  |                |
|                                 | A50                   | MISHRA, et al., "Improved leishmanicidal effect of phosphorothioate antisense oligonucleotides by LDL-mediated delivery," <i>Biochimica et Biophysica Acta</i> 1264:229-237 (1995)   |  |                |
|                                 | A51                   | MIYANO-KUROSAKI et al., "Inhibition of HTLV-I induction and virus-induced syncytia formation by oligodeoxynucleotides." <i>Virus Genes</i> , 12:205-217, 1996.   |  |                |
|                                 | A52                   | MIYAO, et al., "Stability and Pharmacokinetic Characteristics of Oligonucleotides Modified at Terminal Linkages in Mice," <i>Antisense Res. &amp; Dev.</i> 5:115-121 (1995)  |  |                |
|                                 | A53                   | MONTEITH, et al., "Preclinical Evaluation of the Effects of a Novel Antisense Compound Targeting C-raf Kinase in Mice and Monkeys," <i>Toxicolog. Sciences</i> 46:365-375 (1998)   |  |                |
| ↓                               | A54                   | MORRIS, et al., "High Affinity Ligands from <i>in vitro</i> Selection: Complex Targets," <i>Proc. Natl. Acad. Sci. USA</i> 95:2902-2907 (1998)   |  |                |

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| BP                              | A55                   | MURANISHI, S., "Absorption Enhancers," <i>Crit. Rev. in Ther. Drug Carr. Syst.</i> 7:1-33 (1990)   |  |                |
|                                 | A56                   | NANDI, et al., "DNA-induced Partial Unfolding of Prion Protein Leads to its Polymerisation to Amyloid," <i>J. Mol. Biol.</i> 322:153-161 (2002)  |  |                |
|                                 | A57                   | NEURATH, et al., "Anti-HIV-1 activity of anionic polymers: a comparative study of candidate microbicides," <i>BMC Infectious Diseases</i> 2:1-11 (2002)  |  |                |
|                                 | A58                   | OBERHAUSER and WAGNER, "Effective incorporation of 2'-0-methyl-oligoribonucleotides into liposomes and enhanced cell association through modification with thiocholesterol," <i>Nucleic Acids Res.</i> 20(3):533-538 (1992)                                    |  |                |
|                                 | A59                   | OLIVIERI, et al., "Hepatitis C Virus and Arthritis," <i>Rheumatic Diseases Clinics of North America</i> 29:1-18 (2003)   |  |                |
|                                 | A60                   | ORUM and WENGEL, "Locked nucleic acids: A promising molecular family for gene-function analysis and antisense drug development," <i>Curr. Op. in Molecular Ther.</i> 3:239-243 (2001)  |  |                |
|                                 | A61                   | PAN et al., "Isolation of virus-neutralizing RNAs from a large pool of random sequences." <i>Proc. Nat. Acad. Sci. USA</i> , 92:11509-11513, 1995.   |  |                |
| ↓                               | A62                   | PAPAHADJOPoulos, et al., "Targeting of Liposomes to Tumor Cells <i>in Vivo</i> ," <i>Ann. N.Y. Acad. Sci.</i> pp. 64-74 (1987)   |  |                |

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| BP                              | A63                   | PEYMAN, et al., "Inhibition of Viral Growth by Antisense Oligonucleotides Directed against the IE110 and the UL30 mRNA of Herpes Simplex Virus Type-1," <i>Biol. Chem. Hoppe-Seyler</i> 376:195-198 (1995)   |  |  |                |
|                                 | A64                   | QI, et al., "Study on the Inhibitory effect of antisense phosphorothioate oligodeoxynucleotide on coxsackie virus B <sub>3</sub> replication <i>in vitro</i> ," <i>Chinese J Exp. Clin. Virol.</i> 14:253-256 (2000)   |  |  |                |
|                                 | A65                   | RITSCHEL, W., "Standards of Clinical Investigations in the USA," <i>Meth. Find Exp. Clin. Pharmacol.</i> 15(4):207-215 (1993)  |  |  |                |
|                                 | A66                   | SAISON-BEHMOARAS, et al., "Short modified antisense oligonucleotides directed against Ha-ras point mutation induce selective cleavage of the mRNA and inhibit T24 cells proliferation," <i>The EMBO Journal</i> 10:1111-1118 (1991)                            |  |  |                |
|                                 | A67                   | SANGHVI, Y., "Heterocyclic Base Modifications in Nucleic Acids and Their Applications in Antisense Oligonucleotides," <i>Antisense Research and Applications</i> Ch. 15:273-288 (1993)   |  |  |                |
|                                 | A68                   | SCHOTT, H., "Colloidal Dispersions," <i>Remington's Pharmaceutical Sciences</i> Ch. 20:271-300 (1985)  |  |  |                |
|                                 | A69                   | SHEA, et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates," <i>Nucleic Acids Res.</i> 18:3777-3783 (1990)   |  |  |                |
| ↓                               | A70                   | STAHL, et al., "High Incidence of Parvovirus B19 DNA in Synovial Tissue of Patients with Undifferentiated Mono- and Oligoarthritis," <i>Clin. Rheumatol.</i> 19:281-286 (2000)   |  |  |                |

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| BP                              | A71                   | STEIN and CHENG, "Antisense Oligonucleotides as Therapeutic Agents-Is the Bullet Really Magical?" <i>Science</i> 261:1004-1012 (1993)  |  |  | T <sup>6</sup> |
|                                 | A72                   | STEIN, et al., "Phosphorothioate Oligodeoxynucleotides Are Potent Sequence Nonspecific Inhibitors of De Novo Infection by HIV," <i>AIDS Res. &amp; Human Retroviruses</i> 5:639-646 (1989)   |  |  |                |
|                                 | A73                   | STEIN, C.A., "The experimental use of antisense oligonucleotides: a guide for the perplexed," <i>J. Clin. Invest.</i> 108:641-644 (2001)   |  |  |                |
|                                 | A74                   | SUNAMOTO, et al., "Liposome Membranes. V. Interaction of Zinc(II) Ion with Egg Phosphatidylcholine Liposomes," <i>Bull. Chem. Soc. Jpn.</i> 53:2778-2781 (1980)  |  |  |                |
|                                 | A75                   | SWINYARD, <i>Remington's Pharmaceutical Sciences</i> 18th Ed., Ch. 39:782-783 (1990)   |  |  |                |
|                                 | A76                   | SVINARCHUK, et al., "Inhibition of HIV proliferation in MT-4 cells by antisense oligonucleotide conjugated to lipophilic groups," <i>Biochimie</i> 75:49-54 (1993)   |  |  |                |
|                                 | A77                   | TAKAHASHI and YAMADA, "Viral Etiology for Parkinson's Disease – A Possible Role of Influenza A Virus Infection," <i>Jpn J Infect Dis.</i> 52:89-98 (1999)  |  |  |                |
| ↓                               | A78                   | TAKAHASHI, et al., "The Use of Perfluorochemical Emulsion as a Vascular Perfusate in Drug Absorption," <i>J. Pharm. Pharmacol.</i> 40:252-257 (1988)   |  |  |                |

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| BP                              | A79                   | TAKAKURA, et al., "Uptake Characteristics of Oligonucleotides in the Isolated Rat Liver Perfusion System," <i>Antisense &amp; Nucleic Acid Drug Developmt.</i> 6:177-183 (1996)  |                |
|                                 | A80                   | TAKESHITA, et al., "Oligodeoxynucleotides Containing Synthetic Abasic Sites," <i>Journ. of Biol. Chem.</i> 262:10171-10179 (1987)  |                |
|                                 | A81                   | TALBOT, et al., "Virus-Induced Autoimmune Reactions in the CNS," <i>Curr Top Microbiol Immunol</i> 253:247-271 (2001)  |                |
|                                 | A82                   | KROSCHWITZ, J. I., <i>The Concise Encyclopedia Of Polymer Science And Engineering</i> , pp. 858-864 (1990)   |                |
|                                 | A83                   | <i>The Merck Manual of Diagnosis and Therapy</i> 15:1206-1228 (1987)   |                |
|                                 | A84                   | TONKINSON, et al., "Cellular Pharmacology and Protein Binding of Phosphoromonothioate and Phosphorodithioate Oligodeoxynucleotides: A Comparative Study," <i>Antisense Res. &amp; Developmt.</i> 4:269-278 (1994)  |                |
|                                 | A85                   | VIVES, et al., "Lipophilic pro-oligonucleotides are rapidly and efficiently internalized in HeLa cells," <i>Nucleic Acids Res.</i> 27:4071-4076 (1999)   |                |
| ↓                               | A86                   | WALTER, et al., "Viral induction of a chronic asthma phenotype and genetic segregation from the acute response," <i>Journ. of Clin. Invest.</i> 110:165-286 (2002)   |                |

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| BP                                     | A87                   | WANG and HUANG, "Plasmid DNA Adsorbed to pH-Sensitive Liposomes Efficiently Transforms the Target Cells," <i>Bioch. &amp; Biophys. Res. Comm.</i> 147(3):980-985 (1987)  |  |  |  |
|  | A88                   | WEINER, et al., "Liposomes: A Novel Topical Delivery System for Pharmaceutical and Cosmetic Applications," <i>Journ. of Drug Targeting</i> 2:405-410 (1994)  |  |  |  |
|  | A89                   | WU, et al., "Increased Microvascular Permeability Contributes to Preferential Accumulation of Stealth Liposomes in Tumor Tissue," <i>Cancer Research</i> 53:3765-3770 (1993)   |  |  |  |
|  | A90                   | YAMAMOTO, et al., "A Mechanistic Study on Enhancement of Rectal Permeability to Insulin in the Albino Rabbit," <i>Journ. of Pharm. and Exp. Ther.</i> 263:25-31 (1992)   |  |  |  |
|  | A91                   | YAMASHITA, et al., "Effects of diclofenac sodium and disodium ethylenediaminetetraacetate on electrical parameters of the mucosal membrane and their relation to the permeability enhancing effects in the rat jejunum," <i>J. Pharm. Pharmacol.</i> 39:621-626 (1987) |  |  |  |
|  | A92                   | YAMASHITA, et al., "Effect of Adjuvants on Charge-Selective Permeability and Electrical Resistance to Rat Jejunal Membrane," <i>Journ. of Pharm. Sciences</i> 79:579-583 (1990)  |  |  |  |
|  | A93                   | YU, et al., "Stereo-Enriched Phosphorothioate Oligodeoxynucleotides: Synthesis, Biophysical and Biological Properties," <i>Biorg. &amp; Medicinal Chem.</i> 8:275-284 (2000)   |  |  |  |
| ↓                                      | A94                   | ZAMECNIK, et al., "Inhibition of replication and expression of human T-cell lymphotropic virus type III in cultured cells by exogenous synthetic oligonucleotides complementary to viral RNA," <i>Proc. Natl. Acad. Sci. USA</i> 83:4143-4146 (1986)                   |  |  |  |

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| Examiner Initials*                     | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published. |  |  | <sup>2</sup> |
| BP                                     | A95                   | ZHOU and HUANG, "Targeted delivery of DNA by liposomes and polymers," <i>Journ. of Controlled Release</i> 19:269-274 (1992)  |  |  |              |
| BP                                     | A96                   | International Search Report from PCT Application No. PCT/IB03/04573 dated Feb. 18, 2004.   |  |  |              |
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